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(54) Title  
HEATABLE COMESTIBLE

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(57) Claim

1) A container for use with a comestible composition comprising at least one first edible portion and at least one second edible portion, said container being adapted to allow microwave radiation to penetrate said at least one second portion whilst simultaneously substantially preventing microwave radiation from penetrating said at least one first portion, thus heating said at least one second portion while leaving said at least one first portion substantially at its initial temperature.

7) A process for preparing and heating a comestible composition, said process comprising:

- (a) placing at least one first edible portion in a container;
- (b) placing in association with said at least one first portion at least one second edible portion; and
- (c) subjecting said composition to microwave radiation sufficient to heat said at

least one second portion while leaving  
said at least one first portion  
essentially at its initial temperatur ;

wherein said container is adapted to allow said  
microwave radiation to penetrate said at least one  
second edible portion whilst simultaneously  
substantially preventing said microwave radiation  
from penetrating said at least one first edible  
portion.

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Patents Act 1952

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COMPLETE SPECIFICATION FOR THE INVENTION ENTITLED:

**"HEATABLE COMESTIBLE"**

The following statement is a full description of the  
invention including the best method of performing it known  
to the applicant.

THIS INVENTION relates to comestibles and to a method of heating same. In particular, it is directed to comestibles such as ice cream, custard, yogurt, pudding, ices and the like over which is placed a hot sauce or  
5 similar.

This invention is particularly suited to a frozen dessert made with frozen ice cream, custard, yogurt, pudding, ices or the like which is combined with a topping or coating such as chocolate fudge, caramel,  
10 strawberry, marshmallow or the like.

A typical example of the type of comestible to which this invention relates is the ice cream sundae wherein vanilla ice cream is topped with a chocolate, strawberry or caramel sauce and crushed peanuts.

15 A sundae can be prepared generally in either of two ways: (1) by first separately heating the topping and then pouring over the frozen ice cream, or (2) by applying the sauce cold to the frozen ice cream.

However, many consumers prefer the sauce to be heated  
20 rather than to be served cold. To obtain a sundae with a heated topping, one can either purchase the finished product from a store or prepare the dessert from ingredients at home. In either case, the sundae is made by placing the frozen ice cream in a container,  
25 separately heating the topping, and then pouring the hot topping over the ice cream.

For the individual who prepares the sundae himself with heated topping, the process requires keeping separate supplies of ice cream and topping, usually in  
30 quantities greater than what would be required to make a single serve of sundae. Further, the process of making

the sundae involves the separate and time consuming step of heating the topping.

For the retailer supplying sundaes topped with hot sauce, the product requires keeping separate supplies of the basic ingredients and further requires significant time and labour to make a sundae with a heated topping.

At present, most pre-packaged sundaes simply combine frozen sauce with the ice cream. Naturally, one cannot heat the sauce in such a combination without also melting the ice cream.

One prior attempt to provide a pre-packaged sundae wherein the sauce was in combination with the ice cream but could be heated without melting the ice cream consisted of manufacturing the comestible as a frozen core fully surrounded by a frozen coating. Upon exposure to a predetermined amount of microwave energy, only the coating melted leaving the core substantially frozen.

However, when different microwave processes were used by consumers, inconsistent and poor results were obtained and the product was withdrawn from the market.

It is a general object of the present invention to overcome, or at least ameliorate, the above problem and to provide a comestible wherein at least part of that comestible can be heated without affecting the remainder of the comestible.

It has been found that this general object can be achieved by packaging the comestible in a container which selectively allows penetration of microwave

radiation to only that portion(s) of the comestible which requires heating.

Thus, according to a first aspect of the present invention, there is provided a container for use with a  
5 comestible composition comprising at least one first edible portion and at least one second edible portion, said container being adapted to allow microwave radiation to penetrate said at least one second portion whilst simultaneously substantially preventing microwave  
10 radiation from penetrating said at least one first portion, thus heating said at least one second portion while leaving said at least one first portion substantially at its initial temperature.

The selective heating of the comestible of the present  
15 invention is preferably achieved by a shrouding around that portion which is not to be heated, the shrouding reflecting the microwave radiation.

Preferably, there is only a single first portion and only a single second portion, this second portion being  
20 applied as a topping to the upper surface of said first portion.

More preferably, said first portion is frozen ice cream and said topping is a flavoured sauce, such as chocolate, which, optionally, may contain crushed  
25 peanuts.

In practice, suitable comestible compositions are marketed already placed in the container wherein the container is preferably the traditionally shaped cup or tub manufactured from cardboard, polypropylene,  
30 polystyrene or the like and wherein part of the exterior

surface of the cup or tub is covered by a metal shrouding, preferably aluminium foil.

Therefore, according to a second aspect of the present invention, there is provided a process for preparing and heating a comestible composition, said process comprising:

- (a) placing at least one first edible portion in a container;
- (b) placing in association with said at least one first portion at least one second edible portion; and
- (c) subjecting said composition to microwave radiation sufficient to heat said at least one second portion while leaving said at least one first portion essentially at its initial temperature;

wherein said container is adapted to allow said microwave radiation to penetrate said at least one second edible portion whilst simultaneously substantially preventing said microwave radiation from penetrating said at least one first edible portion.

Satisfactory operation of the present invention is dependent upon the size of the container and placement of the shrouding as well as the relative sizes of the respective portions.

Although not wishing to be bound to this limitation, the preferred satisfactory operation can be achieved if (1) the area of the opening of the container is close to, or greater than, the area of the shrouding; and (2) the size of the second portion(s) is sufficient to be heated to an acceptable temperature while not allowing

microwave radiation to penetrate to the first portion(s) adjacent thereto.

A preferred embodiment of the present invention will now be described with reference to the accompanying drawing  
5 which is a cross-sectional view of a comestible composition in a container of this invention.

Referring to the drawing, the container comprises a shaped tub (1), the tub (1) having the dimensions A-E (in mm) as given in the drawing. Aluminium foil (2)  
10 surrounds the majority of the outside of the tub (1). A first portion of vanilla ice-cream (3) (156 mls) is placed into the tub (1), the ice-cream not extending beyond the upper edge (7) of the foil (2). Caramel syrup (4) (40 gms) is placed on top of the portion (3).  
15 Granulated peanuts (5 gms) are sprinkled on top of the syrup (4). The tub (1) is closed with a lid (6) and kept in a freezer until needed. When the comestible is required for consumption, the tub (1) is placed in a conventional domestic microwave oven and subjected to  
20 microwave radiation under "high" power for 40 seconds to produce a heated syrup (4) while leaving the ice-cream (3) substantially frozen and of normal texture.

By using the present invention, a conveniently pre-packaged and easy to prepare comestible is possible  
25 whereby hot sauce-type toppings and the like can be provided on considerably cooler main portions such as ice-cream.

Those skilled in the art will appreciate that the above embodiment is given by way of exemplification of the  
30 invention only and that changes may be made to the details set out therein without departing from the scope of the invention as defined in the following claims.



THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 1) A container for use with a comestible composition comprising at least one first edible portion and at least one second edible portion, said container being adapted to allow microwave radiation to penetrate said at least one second portion whilst simultaneously substantially preventing microwave radiation from penetrating said at least one first portion, thus heating said at least one second portion while leaving said at least one first portion substantially at its initial temperature.
- 2) A container as defined in claim 1, wherein that part of said container which surrounds said at least one first portion is adapted to reflect microwave radiation.
- 3) A container as defined in claim 2, wherein said part of said container is covered by a metal shrouding.
- 4) A container as defined in claim 3, wherein said metal shrouding is aluminium foil.
- 5) A container as defined in any one of claims 1 to 4 wherein the area of the opening of said container is approximately equal to the area of that part of said container which surrounds said at least one first portion.
- 6) A comestible composition and container therefor wherein said composition comprises at least one first edible portion and at least one second edible portion and wherein said container is as defined in any one of claims 1 to 5.

7) A process for preparing and heating a comestible composition, said process comprising:

- 5 (a) placing at least one first edible portion in a container;
- (b) placing in association with said at least one first portion at least one second edible portion; and
- 10 (c) subjecting said composition to microwave radiation sufficient to heat said at least one second portion while leaving said at least one first portion essentially at its initial temperature;

15 wherein said container is adapted to allow said microwave radiation to penetrate said at least one second edible portion whilst simultaneously substantially preventing said microwave radiation from penetrating said at least one first edible portion.

20 8) A comestible composition as defined in claim 6, wherein there is only a single first portion and only a single second portion, said second portion being applied as a topping to the upper surface of said first portion.

25 9) A container for use with a comestible composition substantially as hereindescribed with reference to the accompanying drawing.

10) A composition substantially as hereindescribed with reference to the accompanying drawing.

- 11) A process for preparing and heating a comestible composition substantially as hereindescribed with reference to the accompanying drawing.

DATED this twentieth day of December 1989.

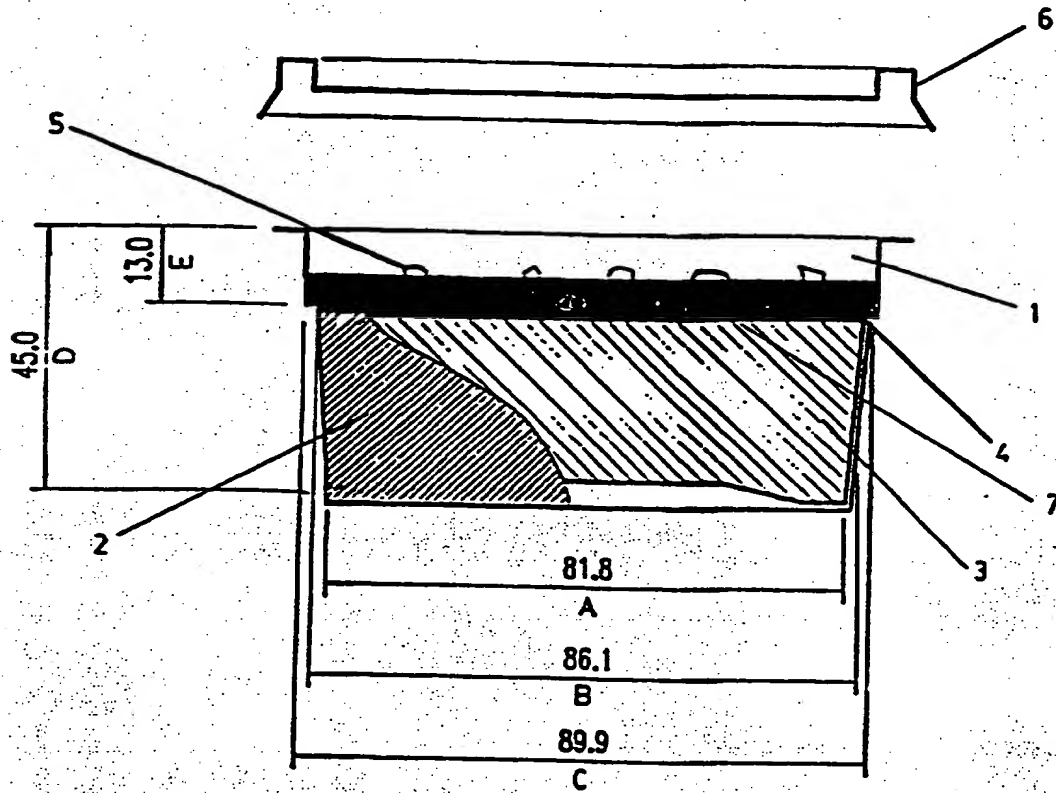
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